

NANA SHASHIASHVILI, NATIA KVIZHINADZE, NANA DUGHASHVILI
THE ACCESSIBILITY OF INFORMATION AND ITS INFLUENCE ON SELF-MEDICATION

TSMU, Department of Social and Clinical Pharmacy

Doi: <https://doi.org/10.52340/jecm.2025.05.06>

ნანა შაშიაშვილი, ნათია კვიჟინაძე, ნანა დუღაშვილი
ინფორმაციის ხელმისაწვდომობა და მისი გავლენა თვითმკურნალობაზე
თსუ, სოციალური დაკლინიკური ფარმაციის დეპარტამენტი

რეზიუმე

თანამედროვე ციფრული ეპოქა მკვეთრად ცვლის ადამიანის ყოველდღიურ ჩვევებსა და გადანაცვტილებებს, მათ შორის ჯანმრთელობასთან დაკავშირებულ ქცევებს. ამ პროცესის ერთ-ერთი მნიშვნელოვანი გამოხატულებაა თვითმკურნალობის პრაქტიკის გავრცელება. ის მჭიდროდ უკავშირდება იმ ინფორმაციას, რომელსაც ადამიანები ონლაინ გარემოში მოიძიებენ. მოსახლეობა ყოველდღიურად აწყდება ჯანმრთელობასთან დაკავშირებულ კონტენტს, რომელიც ვრცელდება სხვადასხვა ფორმით - ვიდეორგოლებს, ბლოგებს, ფორუმების, რეკლამებისა და სოციალური მედიის პოსტების სახით. თვითმკურნალობა არ არის დაკავშირებული მხოლოდ ინდივიდუალურ არჩევანზე, არამედ ის ასახავს საზოგადოებრივ, ეკონომიკურ და კულტურულ პროცესებს. ინფორმაციის ხელმისაწვდომობა ქმნის პირობებს მეტი ცნობიერებისა და პასუხისმგებლობისთვის მოქალაქეთა მხრიდან, მაგრამ უმეტესობას არ გააჩნია სანდოობა და მეცნიერულად დამოწმებული საფუძველი, რაც ზრდის არასწორი ინტერპრეტაციისა და გადანაცვტილებების რისკს და საფრთხეს უქმნის პაციენტის ჯანმრთელობას.

Introduction. Public access to medical information via the internet enables individuals to independently explore diseases, symptoms, medications, and treatment options. A widespread practice has emerged in which people self-diagnose their symptoms using health-related mobile applications, search engines like Google, and online discussion forums. Many users rely on general medical websites, social media groups, pharmaceutical advertisements, product-specific webpages, and platforms where individuals share their personal experiences. In this environment, influencers often play a significant role by promoting so-called "home remedies" and alternative treatment methods through video-sharing platforms such as YouTube and TikTok.

Research Aim. The aim of this study is to explore the relationship between online health information accessibility and self-medication practices among the population. The research seeks to identify the extent to which digital content influences individuals' decisions to self-medicate, evaluate the reliability of commonly accessed sources, and assess the broader public health implications of this behavior. Additionally, the study aims to outline recommendations for promoting safe and evidence-based self-medication practices through improved information governance and public awareness strategies.

Methodology. The study is based on a review and analysis of relevant scientific articles, reports, and publications concerning self-medication practices and the impact of online health information. Secondary data sources are used to identify key trends, risks, and proposed interventions highlighted in the literature.

Results. The analysis reveals that while online sources may occasionally provide temporarily helpful information, self-medication based on non-professional advice poses a serious threat to individual and public health. This is particularly true when individuals self-administer antibiotics, psychotropic drugs, or hormonal medications without any medical oversight. These practices may result in adverse drug reactions, delayed diagnosis of serious conditions, antimicrobial resistance, and psychological or hormonal imbalances, thereby increasing the burden on the healthcare system.

In the context of the digital age, the importance of health literacy has become increasingly pronounced. Individuals with higher levels of health education demonstrate an improved ability to manage medication dosages, recognize potential side effects, and discern the appropriate boundaries of self-care. They also exhibit a more critical approach to unverified sources, including advertisements and non-professional opinions, which helps them navigate the overwhelming volume of health-related content online [1,2,3]. This contrast underscores the pivotal role of health literacy in enabling safe and responsible health behavior.

In Georgia, however, the level of health literacy varies significantly among the population. Many individuals lack the cognitive and evaluative tools required to distinguish between credible medical content and baseless or misleading claims. The media - especially television, digital platforms, and print journalism - strongly influences public health decisions. So-called “miracle cure” advertisements create unrealistic expectations, particularly regarding chronic disease management, pain relief, and mental well-being.

Moreover, the growing influence of non-medical influencers on social media presents a pressing public health challenge. These individuals, often without any formal healthcare background, provide treatment advice to large audiences, frequently contradicting evidence-based medical guidelines. This trend is particularly dangerous in the context of vulnerable populations who may place greater trust in relatable public figures than in healthcare professionals.

Importantly, self-medication is not solely a product of information access. It is also shaped by systemic challenges: limited availability of healthcare services, high costs of medical consultations, over-the-counter access to pharmaceuticals, weak primary healthcare infrastructure, and a persistent lack of trust in the medical system. In such an environment, the abundance of digital health content - much of it inconsistent, unreliable, or unsubstantiated - amplifies existing health risks [4,5].

One of the most critical findings is the uncritical use of digital resources. People frequently rely on websites and forums that do not adhere to Georgian medical standards, legal norms, or cultural sensitivities. This is further exacerbated by the lack of reliable Georgian-language digital health content. The majority of available online resources are either outdated or do not meet scientific and professional standards [6,7].

Pharmaceutical advertising has also been identified as a major contributor to inappropriate self-medication. These advertisements, primarily shaped by commercial interests, often downplay or omit critical risk information. When combined with the limited financial capacity of certain population segments and insufficient healthcare access - especially in rural regions - these advertisements effectively drive individuals toward potentially harmful self-treatment practices [8].

The data synthesis underscores an urgent need for coordinated intervention. Educational and preventive strategies must target both the digital information environment and the broader structural deficiencies in the healthcare system. Key recommendations include:

Enhancing media and health literacy: Public information campaigns should be designed not only to disseminate factual medical knowledge but also to equip individuals with the cognitive tools needed to critically analyze and verify health-related content. This includes understanding the difference between anecdotal experiences and scientific evidence, recognizing sensationalist or misleading language, identifying trusted sources (such as peer-reviewed journals or official medical websites), and practicing cautious skepticism toward social media trends and influencer recommendations. Educational interventions should begin in schools and extend to community-level workshops, mass media

programming, and workplace initiatives, targeting all age groups and social strata. Health literacy should become an integral part of general education and public health policy.

Stricter regulation of pharmaceutical advertising: Regulatory authorities must enforce guidelines that ensure pharmaceutical advertisements present balanced, scientifically grounded, and ethically responsible messaging. This includes mandatory disclosure of side effects, potential drug interactions, contraindications, and warnings against unsupervised use. Advertisements must avoid emotional manipulation, unproven claims, or appeals to fear. Moreover, all promotional content should be reviewed by health authorities prior to publication or broadcast, and violators should face penalties. Public access to a centralized online repository of all approved pharmaceutical advertisements with full risk information could further strengthen transparency and accountability.

Development of high-quality Georgian-language platforms: The creation of reliable, user-friendly, and regularly updated Georgian-language digital platforms is essential for bridging the information gap. These platforms should be maintained through cooperation among the Ministry of Health, academic institutions, and professional associations such as medical and pharmaceutical councils. Content must be adapted for both medical professionals and the general population, offering different levels of complexity to serve diverse audiences. Platforms should include verified drug information, treatment guidelines, symptom checkers, frequently asked questions, myth-busting content, and access to teleconsultation services. A strong user interface and mobile accessibility are critical for ensuring widespread usage, particularly in rural or underserved areas.

Empowering pharmacists: Pharmacists should be redefined as frontline public health agents and not just medication dispensers. To fulfill this role, they must undergo continuous professional development in areas such as patient counseling, clinical pharmacology, communication skills, and risk communication. Legal and institutional frameworks should support the expansion of pharmacists' responsibilities, such as providing brief consultations, advising on drug interactions, and referring patients to physicians when appropriate. Public awareness campaigns should emphasize the pharmacist's advisory role to encourage people to seek guidance from qualified professionals rather than rely on hearsay or online speculation.

Digital monitoring mechanisms: State institutions, in collaboration with cybersecurity and digital media experts, should establish specialized units responsible for identifying and countering health-related misinformation online. This includes real-time monitoring of social media platforms, forums, and video-sharing websites for harmful or misleading content. Fact-checking partnerships, AI-based flagging systems, and public reporting tools can help manage the volume of data. Additionally, collaboration with platform owners (e.g., Facebook, YouTube, TikTok) is necessary to enforce content takedown policies and promote verified content in users' feeds. Public trust in such monitoring mechanisms can be strengthened by ensuring transparency, accountability, and the non-politicized nature of interventions.

Improved access to care: Access to affordable, quality primary care remains one of the strongest deterrents against harmful self-medication. Strengthening the family doctor model means increasing their geographic availability, ensuring continuous medical education, reducing administrative burdens, and enabling better diagnostics and prescription capacity at the primary level. Financial reforms - such as expanded insurance coverage, subsidized consultations, and digital health services - can reduce economic barriers to care. Additionally, outreach programs for remote or marginalized populations can help integrate these groups into the healthcare system, reducing dependence on unreliable self-care practices.

The results emphasize that self-medication, when guided by accurate knowledge and sound judgment, is not inherently negative. It can empower individuals, improve health system efficiency, and

foster personal responsibility. However, this potential can only be realized if the population is provided with the tools and resources necessary to make informed choices - most notably, access to trustworthy information, reliable healthcare services, and protective regulatory frameworks. Addressing these factors collectively will reduce health risks and foster a culture of safe, evidence-based self-care in Georgia.

Conclusion. In modern society, access to information represents both progress and a challenge. Inconsistent, unreliable, or commercially driven content is frequently linked to inappropriate self-medication practices, which may endanger both individual patient health and public health at large. Only through coordinated action - uniting the efforts of the public, the government, and professional communities - can a culture of safe, informed, and rational self-medication be cultivated.

References:

1. Jia X, Pang Y, Liu LS. Online Health Information Seeking Behavior: A Systematic Review. *Healthcare (Basel)*. 2021 Dec 16;9(12):1740. doi: 10.3390/healthcare9121740. PMID: 34946466.
2. Bujnowska-Fedak MM, Węgierek P. The Impact of Online Health Information on Patient Health Behaviours and Making Decisions Concerning Health. *Int J Environ Res Public Health*. 2020 Jan 31;17(3):880. doi: 10.3390/ijerph17030880. PMID: 32023828.
3. Shashiashvili, N., & Bakradze, N. (2025). Pharmaceutical Market & Pharmacy Services: Analysis of challenges and opportunities on the example of the German model. *Georgian Scientists* 7 (2), 80–95. <https://doi.org/10.52340/g.s.2025.07.02.08>
4. Correia Alana et al. (2022). SELF MEDICATION INFLUENCED BY SOCIAL MEDIA: PHARMACIST'S ROLE IN THE PREVENTION TOOL. *Health and Society*. 2. 10.51249/hs.v2i01.665.
5. Thapa Deependra, Visentin Denis et al. (2020). The influence of online health information on health decisions: A systematic review. *Patient Education and Counseling*. 104. 10.1016/j.pec.2020.11.016.
6. Prabhune Akash et al. (2023). The Role of the Internet in Influencing Self-Medication Behaviors Among Urban Residents in India: A Cross-sectional Study. 10.21203/rs.3.rs-3555723/v1.
7. Ephrem, A., Thomas, S., et al. A study to assess the effect of media in promoting self-medication use. *Int. J. Res.* 2022; Rev. 9(9): 348–354. <https://doi.org/10.52403/ijrr.20220938>
8. Lim HM, Dunn AG, Lim JR, Abdullah A, Ng CJ. Association between online health information-seeking and medication adherence: A systematic review and meta-analysis. *DIGITAL HEALTH*. 2022;8. doi:10.1177/20552076221097784

NANA SHASHIASHVILI, NATIA KVIZHINADZE, NANA DUGHASHVILI
THE ACCESSIBILITY OF INFORMATION AND ITS INFLUENCE ON SELF-MEDICATION
 TSMU, Department of Social and Clinical Pharmacy

SUMMARY

The modern digital age is significantly changing people's daily habits and decisions, including health-related behaviors. One of the key manifestations of this process is the rise of self-medication practices. This is increasingly linked to the information that people search for in the online environment. The population is confronted daily with health-related content that is disseminated in various forms - videos, blogs, forums, advertisements, and social media posts. Self-medication is not solely related to individual choice; it also reflects societal, economic, and cultural processes. The availability of information creates opportunities for greater awareness and responsibility among citizens, but most of it lacks reliability and scientifically validated foundations, increasing the risk of misinterpretation and poor decision-making, thereby endangering the patient's health.

Keywords: Access to information, Self-medication, Pharmaceutical advertisements

